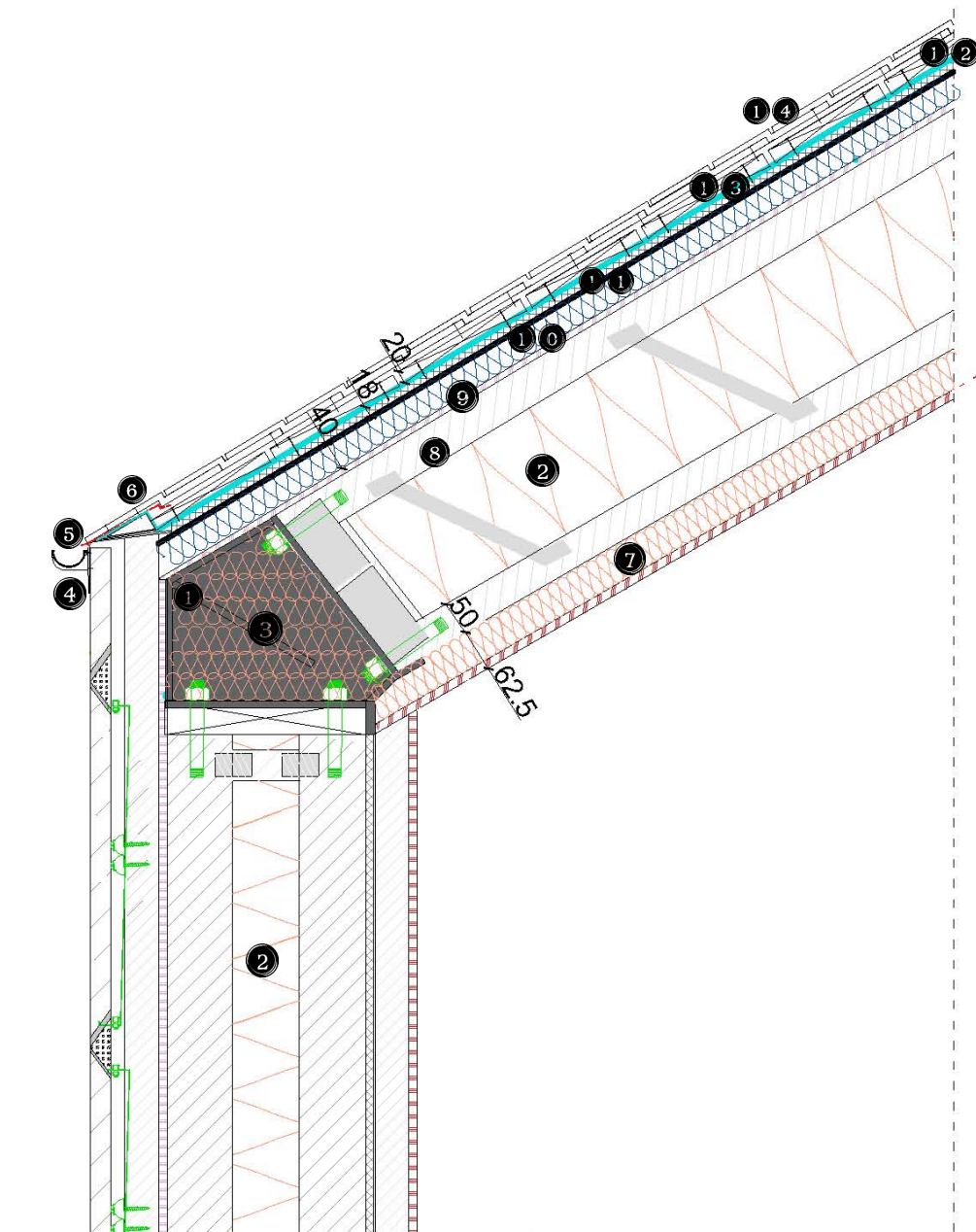


Typical Detail – Passive Twin Stud Wall to Timber Roof



NOTES:

1. Insulation overlapped within roof structure Earthwool® OmniFit, OmniFit Slab - Multi-purpose, non-combustible, glass mineral wool roll for installation by friction fitting. Flexible and robust made with a formaldehyde-free binder derived from rapidly renewable materials classified as Zero ODP and Zero GWP. Thermal conductivity (K-value): 0.034 W/mK. Roll width: 1200mm. Fire performance: Euroclass A1 to BS EN ISO 13501-1. Environmental: A generic BRE Green Guide rating. Manufacturer: Knauf Insulation Ltd.
2. 300mm WARMCEL Cellulose Fibre Insulation - Low-dust cellulose with a small percentage of oil or similar dust dampener added. Thermal Conductivity Lambda 90/90 23°C/50%RH 0.038 W/mK to EN 12667 EN ISO 10456 EAD 040138-00-1201. Reaction to Fire Class E. Specific Airflow Resistance for bulk density 60.0 kg/m³ ≤18 kPa*s/m², Critical Moisture Content 75%, Density min 65 (kg/m³), Specific heat capacity 2020 ± 6% J/kgK, vapor permeable. Manufacturer: PYC Insulation.
3. Eave steel bracket with threaded rods glued into studs and rafters, Eave steel connectors to support eave panels connection, S275 steel, thickness 10mm, size 146x146mm, bolts M20 8 & in 22 mm diameter holes. Horizontal bolt spacing 60/60/60/60 mm. Thermally coated with zinc-aluminium alloys. Fire exposed sides coated with fire resistant vermiculite spray. Supplier: Barrett Steel Scotland, Fixing/fasteners Supplier: TR Fastenings Ltd.
4. Aluminium bargeboard 125x75mm overlap over cladding, bedded and pointed in cement mortar, sealed with sealant. Bargeboard flashings, Type/Standard: galvanized steel 0.7mm gauge bargeboard flashings folded to the internal angle 90°, Standard zinc coating (g/m²) 275 (Z275) and blue slate colour polyester painted, Nominal organic coating thickness (µm) 25 to EN13523, to BS EN 10346:2009, Unit sizes: 3m lengths with 125mm x 75mm overlap over cladding. Accessories: Silicone sealant, Fasteners. Manufacturer: Accord Steel Cladding Ltd.
5. Gutter and Conductor-Head Guards, Type/Standard: Gutter Plain Half Round Gravity fed die castings using LM 27 Alloy, Black textured polyester powder coated to BS5252 (inc. BS4800), Unit sizes: 100mm width, Length 1.8m, Accessories: 90° internal and external angles, Outlet pieces with round or square drop as required, Fascia brackets, Rafter brackets, Rise and fall brackets, Left hand and right hand stop ends, Union clips, Silicone sealant, Stainless steel gutter bolts, Fasteners. Gutter of furnish sheet metal 24 gauge, galvanised, black with reglets on top of undercloak, fixed with sheet metal screws 22mm long. Included: Downpipes, Type/Standard: Cast Iron Round Pipe, Grey iron and conform to BS460, Colour Grey/Black, Unit sizes: Diameter - 65mm, Length 1.8m, 1.2m, 0.9m and 0.6m, Accessories: Shoes, Top offsets, Side offsets, Plinth offsets, Branches, Bends, Loose clips, Loose socket with spigot, Square to round connectors, Fasteners. Manufacturer: Harrison Thompson & Co. Ltd.
6. Tiling timber file 85mmx30mm to support overhangs at verge level.
7. Scots pine verge fillet, Type/Standard: BS 4978:2007+A2:2017, grade C16 specified in BS EN 1995-1-1:2004+A2:2014, Unit sizes: 85 mm x 30 mm x 3m, Manufacturer: Stewart Milne Group.
8. 62.5 mm insulated lining plasterboard Eurothane® PL - high performance rigid polyisocyanurate (PIR) foam board with a 12.5mm tapered edge plasterboard bonded to one side for use as an internal lining. Faced on the reverse with a multi-layer kraft paper and aluminium foil. Manufactured to ISO 9001 Quality and ISO 14001 Environmental Management Systems. Manufactured using a blowing agent with zero ozone depletion potential (ODP) and low global warming potential (GWP). Low thermal conductivity of 0.022 W/mK (insulation component). Plasterboard laminate gives Eurothane® PL a Euroclass B-s1, d0 fire performance. CE marked in accordance with harmonised European standard EN 13950. Board size: 2400 x 1200 mm. Manufacturer: Recticel Insulation.
9. Easi-Joists W5300, metal web joists, Depth 304mm with 47mm deep scots pine joists, Type/Standard: softwood grade to BS5268-2:2000 and to CP112 part 2, Unit sizes: 147x47x304mm deep, Durability: softwood C16, strong metal web. Manufacturer: Stewart Milne Group.
10. External Weather Defence sarking boards, fully non-combustible Euroclass A1 rated sheathing boards and confirmed by BRE as a suitable alternative to cement particle board in external systems, tested or assessed against BS8414-2 or BR 135, lightweight board which can easily create corners or striking curves. Sheathing board(s) layer 1 x 12.5mm. Weather Defence Air permeability: to European standard EN 12114 0.002 m³/m²/hr - a negligible flow of air; Humid movement: to EN318 maximum expansion of 0.11mm per m (0.011%), from 65% to 85% relative humidity. Sizes: Width: 1200mm, Length: 2400mm, Boards per pallet: 52, Board weight: 10.8kg/m². Fixings and sealants: F590/W Flat Plate to studs corresponding with all horizontal board joints, Weather Defence board laid horizontally across studs in a 'brick bond' pattern, Siniat GTEC Wet Area Self Drilling screws at maximum 300mm centres, Fire Rated Silicone Sealant or Weather Defence Joint Tape. Manufacturer: Etex Building Performance Siniat.
11. 50mm PermaRock EPS-Premium Insulation (EPS100) layer over rafters.
12. Sheathing boards, Type/Standard: softwood grade to BS5268-2:2000 and to CP112 part 2, Unit sizes: 600x1200x38mm thick, Durability: OSB softwood C16. Manufacturer: Stewart Milne Group.
13. Roofing felt underlay, Type/Standard: Monatite Supa R Roofing Underlay - Polypropylene (pp) hydrophilic spun bond with a strong reinforcing grid encapsulated with a polyethylene (PE) top coating layer to BS EN 13707:2004+A2:2009 Part 2, product code 3007197, Unit sizes: Material thickness: 0.79mm, Water vapour resistance: 250 MN/sg, weight of 150 g/m², in 1 x 50 m roll size. Durability: Type W1 strength. Manufacturer: BMI UK & Ireland.
14. Sarking boards - loosely butted 210x20mm, 600mm long extended over bargeboard fixed with wired nails 70mm long. Type/Standard: softwood grade to BS5268-2:2000 and to CP112 part 2, Unit sizes: 210x20mm thick, Durability: softwood C16. Manufacturer: Stewart Milne Group.
15. Rock classic slates W1<0.6%, variable size 450-445 x 295-300mm with 77mm headlap. Type/Standard: SGA 120 W1(s 0.6%), T1, S1 to BS 5534:2014 and BS EN 1999-1-4:2005, close match for texture, colour and size to Ballachulish Slate. Unit sizes: 450-445 x 295-300 with 77 mm headlap. Durability: random-diminishing slate from indigenous rock. Manufacturer: SIG Roofing.